ABSTRACT

A process for easily and inexpensively producing an imidazo[1,2-b]pyridazin-3-ylsulfonamide derivative which has a substituent bonded to the 6-position carbon atom and is represented by the formula (II):

$$\begin{array}{c|c}
 & N \\
 & Y
\end{array}$$
(III)

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(wherein R represents lower alkyl, lower cycloalkyl optionally substituted by lower alkyl, lower alkenyl, or lower alkynyl), the process comprising reacting an imidazo[1,2-b]pyridazine compound represented by the formula (I):

$$Z$$
 N
 X
 Y
 X
 Y
 X
 Y

(wherein X represents halogeno or lower alkyl optionally substituted by halogeno; Y represents hydrogen or $SO_2N=CH-NR^1R^2$; and Z represents halogeno or OSO_2R^3) with an organometallic compound in the presence of a transition metal catalyst. The derivative is useful as an intermediate for herbicides.